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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,741	02/12/2004	Faiz Feisal Sherman	7900C	5603

27752 7590 08/20/2004

THE PROCTER & GAMBLE COMPANY
INTELLECTUAL PROPERTY DIVISION
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EXAMINER

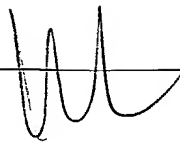
FRISTOE JR, JOHN K

ART UNIT	PAPER NUMBER
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3754

DATE MAILED: 08/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/777,741	Applicant(s) SHERMAN ET AL. 	
	Examiner John K. Fristoe Jr.	Art Unit 3754	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3,4,9 and 14 is/are rejected.
- 7) ☒ Claim(s) 2,5-8,10-13 and 15-17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Double Patenting

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claim 1 is provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of copending Application No.

10/048,082 in view of U.S. Pat. No. 6,290,862 (Silverbrook). Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 of Application No. 10/048,082 in view of U.S. Pat. No. 6,290,862 "anticipates" Application claim 1.

Accordingly, Application claim 1 is not patentably distinct from claim 1 of Application No.

10/048,082 in view of U.S. Pat. No. 6,290,862.

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Here Application 10/048,082 claim 1 requires:

A microvalve for controlling fluid flow, comprising:

- A body portion having a plurality of spaced openings formed therein;
- A wafer located adjacent to and substantially parallel with said body portion, said wafer comprising a shutter integral thereto, said shutter having a plurality of spaced openings formed therein;
- Said wafer further comprising a drive mechanism integral thereto for causing said shutter to move with respect to said body portion so that said spaced openings of said shutter are brought into and out of alignment with said spaced openings of said body portion, wherein said microvalve is in an open position and a closed position, respectively; and,
- Wherein said wafer further comprises a latching mechanism integral thereto for preventing said shutter from moving with respect to said body portion.

While Application claim 1 requires:

A microvalve for controlling fluid flow, comprising:

- A body portion having at least one opening formed therein;
- A shutter located adjacent to and substantially parallel with said portion, and
- A drive mechanism for causing said shutter to pivot with respect to said body portion so that said shutter is brought into and out of alignment with said opening of said body portion, wherein said microvalve is in a closed position and an open position, respectively.

Following the rationale of *In re Goodman* cited in the preceding paragraph, where applicant has once been granted a patent containing a claim for the specific or narrower

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invention, applicant may not then obtain a second patent with a claim for the generic or broader invention without first submitting an appropriate terminal disclaimer. Note that since Application claim 1 is anticipated by claim 1 of Application No. 10/048,082, and since anticipation is the epitome of obviousness, then Application claim 1 are obvious over claim 1 of Application No. 10/048,082.

In addition Application claim 1 requires a pivoting movement of the shutter; claim 1 of Application 10/048,082 only requires a movement of the shutter. Silverbrook teaches the use of a pivoting motion (fig. 2) in a microvalve that has a shutter (31). It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the microvalve having a shutter of claim 1 of Application No. 10/048,082 by having the movement be a pivoting motion as taught by Silverbrook because it is a well known efficient way of moving a shutter.

This is a provisional obviousness-type double patenting rejection.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claim 9 recites the limitation "said first and second impact comb drives" in line 1. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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6. Claims 1, 3, 4, and 14 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Pat. No. 6,290,862 (Silverbrook). Silverbrook discloses a microvalve for controlling fluid flow comprising a body (16), an opening (30), a shutter (31), a drive mechanism (35) for causing the shutter (31) to pivot (fig. 2) which opens and closes the microvalve, a first stopper (28), a second stopper (the inside portion of 35), and a controller (col. 6, lines 42-55).

Allowable Subject Matter

7. Claims 2, 5-8, 10-13, and 15-17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

8. The following is a statement of reasons for the indication of allowable subject matter: the examiner considers the term "impact" to mean that the driver is forcibly hitting the shutter as defined in the specification page 9, lines 10-15.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

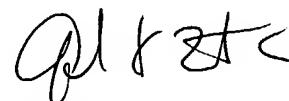
U.S. Pat. No. 5,873,562 (Marugg) discloses a shutter that opens and closes a flow path.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John K. Fristoe Jr. whose telephone number is (703) 308-1437. The examiner can normally be reached on Monday-Friday, 7: 00 a.m-4: 30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Louis G. Mancene can be reached on (703) 308-2696. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John K. Fristoe Jr.
Examiner
Art Unit 3754

JKF



EDWARD K. LOOK
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 3700

8/19/04